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PTO/SB/08A (10-96)
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Substitute for form 1449A/PTO
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(use as many sheets as necessary)

Complete if Known

Application Number	Not Yet Assigned
Filing Date	Herewith
First Named Inventor	Daniel E. Grupp
Group Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned

TO
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JC619/6197
JC619/6197

Sheet 1 of 6 Attorney Docket Number 003771.P001D

U.S. PATENT DOCUMENTS

Examiner Initials *	U.S. Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Filing Date if Appropriate
			MM-DD-YYYY	
✓	4,631,352	Daud et al.	12/23/1986	
✓	4,675,711	Harder et al.	6/23/1987	
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✓	4,935,804	Ito et al.	6/19/1990	
✓	5,019,530	Kleinsasser et al.	5/28/1991	
✓	5,258,625	Kamohara et al.	11/2/1993	
✓	5,291,274	Tamura	3/1/1994	
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OTHER DOCUMENTS

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✓	P. Hadley, "Single-Electron Tunneling Devices", <u>TMR Programme Certosa di Pontignano (SI)</u> , 7/20, September 1997, 1-15	
✓	Haroon Ahmed, Kazuo Nakazato, "Single-Electron Devices", <u>Microelectronic Engineering</u> 32, (1996), pp. 297-315	
✓	John Randall et al., "Potential Nanoelectronic Integrated Circuit Technologies", <u>Microelectronic Engineering</u> 32, (1996) pp. 15-30	
✓	Bogdan Majkusiak, "Experimental and Theoretical Study of the Current-Voltage Characteristics of the MISIM Tunnel Transistor", <u>IEEE Transactions on Electron Devices</u> Vol 45 No 9 (Sept 1998) pp. 1903-1911	
✓	C.A. Mead, "Operation of Tunnel-Emission Devices", <u>Journal of Applied Physics</u> , Vo. 32, No. 4 (April 1959)	

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Sheet **2** of **6** Attorney Docket Number **003771.P001D**

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✓	5,612,233	Roesner et al.	3/18/1997	
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✓	5,705,827	Baba et al.	1/6/1998	
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✓	Y. Takahashi et al., "Fabrication Technique for SI Single-Electron Transistor Operating at Room Temperature", <u>IEEE Electronics Letters Online No 19950063 Vol 31 No 2 (1/19/95) pp. 136-137</u>	
✓	Kazuo Nakazato and Haroon Ahmed, "Enhancement of Coulomb blockade in Semiconductor Tunnel Junctions", <u>Appl. Phys. Lett., 73/21/95</u> pp. 3170-3172	
✓	R. H. Davis and H.H. Hosack, "Double Barrier in Thin-Film Triodes", <u>Journal of Applied Physics, Vol. 34, No. 4 (Part 1), (4/63) pp. R64-R66</u>	
✓	Kiyonori Kato, "Liquid helium Level Meter by Audio-Sound Detection", <u>Rev. Sci. Instrum (60/7), (7/89) pp. 1343-1345</u>	
✓	E. Tosatti and R. Martonak, "Rotational Melting in Displacive Quantum Paraelectrics", <u>Solid State Communications, Vol. 92, Nos. 1-2 (1994) pp. 167-180</u>	

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DAS	Hiroyuki Sakaki, "Quantum Microstructure Devices", <u>Solid State Communication</u> , Vol. 92, Nos. 1-2, (1994) pp. 119-127	
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✓	R.J. Schoelkopf et al., "The RF-SET: A Fast and Ultra-Sensitive Electrometer", Submitted to Science, (12/11/97) pp. 1-6	
{	Federico Capaso et al., "Multiple Negative Transconductance and Differential Conductance in a Bipolar Transistor by Sequential Quenching of Resonant Tunneling" <u>Ann Phys Lett</u> 53 (12) (19 Sept 1988) pp. 1056-1058	
{	J.L. Huber et al., "An RTD/Transistor Switching Block and its Possible Application in Binary and Ternary Adders", <u>IEEE Transaction of Electron Devices</u> Vol. 44 No. 12 (12/97) pp. 2149-2153	

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<i>Dfle</i>	Robert F. Service, "MICROELECTRONICS" "IBM Puts Fast Chips on a New Footing", <u>Science</u> , Vol. 281, (8/14/98) pp. 893-894	
<i>✓</i>	David Berman et al., "Single-Electron Transistor Research", http://nanoweb.mit.edu/annual-report/14 , (downloaded 10/7/98), pp. 1-4	
<i>✓</i>	Mikko Paalanen, "Nanophysics-A New Frontier of Science", http://www.edita.fi/lehdet/polysteekki/297/nanop.html , (downloaded 10/7/98) nn 1-5	
<i>✓</i>	Steven P. Beaumont, "III-V Nanoelectronics", Elsevier Science B.V., <u>Microelectronic Engineering</u> 32, (1996) pp. 283-295	
<i>✓</i>	P.K. Vasudev and P.M. Zeitoff, "Si-ULSI with a Scaled-Down Future", <u>IEEE Circuits & Devices</u> , (1998), pp. 19-29	

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Pde	Federico Capasso and Richard A. Kiehl, "Resonant Tunneling Transistor with Quantum Well Base and High-Energy Injection: A New Negative Differential Resistance Device". <u>I Ann. Phys.</u> 58 (3) (1 April 1985) nn 1366-1367	
	A.C. Seabaugh et al., "Resonant Transmission in the Base/Collector Junction of a Bipolar Quantum-Well Resonant-Tunneling Transistor". <u>Ann. Phys. Lett.</u> 59 (26) (23 Dec 1991) nn 3413-3415	
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C	Alan C. Seabaugh et al., "Pseudomorphic Bipolar Quantum Resonant-Tunneling Transistor", <u>IEEE Transactions on Electron Devices</u> Vol. 36 No. 10 (10/89) nn 2327-2334	
C	D. Ali and H. Ahmed, "Coulomb Blockade in a Silicon Tunnel Junction Device", <u>Appl. Phys. Lett.</u> 64 (16), (18 April 1994), pp. 2119-2120	

Examiner Signature	Doe, John	Date Considered	16 Feb 01
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